

## Worksheet 5. Application Summary

This worksheet will be posted on the web to notify the public of requests for critical use exemptions beyond the 2005 phase out for methyl bromide. Therefore, this worksheet cannot be claimed as CBI.

1. **Consortium Name:** Michigan Cucurbit Growers
2. **Location:** Michigan, USA
3. **Crop:** Cucurbits including: watermelon, cucumber, summer squash, winter squash
4. **Pounds of Methyl Bromide Requested** 2007 58,625 lbs.
5. **Acres Treated with Methyl Bromide** 2007 547 Acres
6. If methyl bromide is requested for additional years, reason for request:  
Additional time is needed to develop effective alternatives for Phytophthora capsici. Michigan State University has an active research program, and is making progress in disease management.

<u>2006</u>	<u>60,970</u>	<u>lbs.</u>	<u>Area Treated</u>	<u>569</u>	<u>Acres</u>
<u>2007</u>	<u>58,625</u>	<u>lbs.</u>	<u>Area Treated</u>	<u>547</u>	<u>Acres</u>
<u>2008</u>	<u>58,625</u>	<u>lbs.</u>	<u>Area Treated</u>	<u>547</u>	<u>Acres</u>

Place an "X" in the column(s) labeled "Not Technically Feasible" and/or "Not Economically Feasible" where appropriate. Use the "Reasons" column to describe why the potential alternative is not feasible.

Potential Alternatives	Not Technically Feasible	Not Economically Feasible	Reasons
1,3-Dichloropropene, Chloropicrin	X		Efficacy unproven or inconsistent, plant back restriction too long.
1,3-D, Chloropicrin, Pebulate	X		Not effective
1,3-D, Metam Sodium	X		Efficacy unproven or inconsistent, plant back restriction too long.
Basamid	X		Not effective
Basamid, Solarization	X		Not effective. Climate in Michigan is too cold for solarization.
Metam Sodium	X		Efficacy unproven or inconsistent, plant back restriction too long.
Metam Sodium, Crop Rotation	X		Efficacy unproven or inconsistent, plant back restriction too long.
Methyl Iodide	X		Not registered in USA. Efficacy unproven or inconsistent
Propargyl Bromide	X		Not registered in USA.
Biofumigation	X		Efficacy is not proven, requires solarization
Solarization	X		Climate in Michigan is too cold for solarization.
Solarization, Fungicides	X		Climate in Michigan is too cold for solarization. Documented fungicide resistance.
Steam	X		Not technically feasible for large scale agriculture.
Biological Control	X		Efficacy is not proven.

cover Crops, Mulching	X		Not effective, already used in commercial production.
rop Residue, Compost	X		Not tested against <i>P. capsici</i> , and efficacy can vary regionally.
rop Rotation, Fallow	X		Not effective, pathogens long-lived, already used in commercial production.
ndophytes	X		Efficacy is not proven.
ooding, Water Management	X		Flooding is not feasible, trickle and raised beds are used, but frequent heavy rains favor disease.
eneral IPM	X		Utilized by growers, but is not adequate for disease control.
rafting, Resistant Rootstock,	X		Resistant rootstock has not been identified. Would not be effective against root rot.
lant Breeding	X		Resistant germplasm has not been identified.
rganic Amendments, Compost	X		Not tested against <i>P. capsici</i> .
lanting Time	X		Not effective, <i>P. capsici</i> is a problem year-round.
lowing and Tillage	X		Not tested against <i>P. capsici</i> .
esistant Varieties	X		Resistant varieties have not been identified.
oilless Culture	X		Volcanic ash, rockwool are not viable alternatives for large-scale production in Michigan USA.
ubstrates, Plug Plants	X		Primary pathogens are not disseminated on seed or transplants.